United States Environmental Protection Agency
Washington, DC 20460

Interagency Agreement/ Amendment

Part 1 - General Information

1. EPA IA Identification Number DW-70-95775601 - 3	2. Funding Location by Region EPA R5
3. Other Agency IA ID Number (if known)	4. Awarding Office IASSC West
5. Type of Action Augmentation: Increase	6. IA Specialist: Aaron Simril 206-553-0459 Simril.Aaron@epa.gov

7. Name and Address of EPA Organization US Environmental Protection Agency IASSC West 1200 Sixth Avenue, Suite 900, OMP-145 Seattle, WA 98101	8. Name and Address of Other Agency U.S. Department of Homeland Security USCG / Acquisition Directorate R&D Center / 1 Chelsea Street New London, CT 06320

9. DUNS: 029128894	10. BETC: DISB	11. DUNS: 806754677	12. BETC: COLL

13. Project Title and Description

Great Lakes Restoration Initiative Implementation - U.S. Coast Guard (USCG)

To reduce the number of introductions and transfer rate of non-indigenous species carried in ballast water; to develop detection and response techniques to oil in icy water; to develop a system that will recover heavy oil from the sea floor; to reduce sources of toxic substances on Coast Guard property in the Great Lakes area.

This amendment increases Federal Funding by $2,500,000, changes the other agency Project Officer to Loretta McRae, updates the Scope of Work and adds Term and Condition #26.

14. EPA Project Officer (Name, Address, Telephone Number) Laura Evans 77 West Jackson Blvd. Chicago, IL 60604-3507 312-886-0851 E-Mail: Evans.Laura@epa.gov FAX: 312-692-2021	15. Other Agency Project Officer (Name, Address, Telephone) Loretta McRae ORM/Budget Execution Division/2100 2nd St. SW Washington, DC 20593-7245 202-372-3559 E-Mail: Loretta.K.McRae@uscg.mil FAX:
16. Project Period: 02/24/2010 to 05/30/2014	17. Budget Period: 02/24/2010 to 05/30/2014

18. Scope of Work (See Attachment)

The revised Scope of Work is attached.

19. Employer/Tax ID No. 520852695	20. CAGE No: 347A4	21. ALC: 68-01-0727

22. Statutory Authority for Transfer of Funds and Interagency Agreement Public Law 111-88; Department of Interior; Environment and Related Agencies Appropriations Act; 2010	23. Other Agency Type Federal Agency

24. Revise Reimbursable Funds and Direct Fund Cites (only complete if applicable)

	Previous Funding	This Action	Amended Total
Revise Reimbursable (in-house)			0
Direct Fund Cite (contractor)			0
Total			0

Funds	Previous Amount	Amount This Action	Total Amount
25. EPA Amount	$9,074,700	$2,500,000	$11,574,700
26. EPA In-Kind Amount			$0
27. Other Agency Amount	$1,465,228	$0	$1,465,228
28. Other Agency In-Kind Amount			$0
29. Total Project Cost	$10,539,928	$2,500,000	$13,039,928

30. Fiscal Information

Treas. Symbol	DCN	FY	Appropriation	Budget Org	PRC	Object Class	Site/Project	Cost Org	Ob/De-Ob Amt
682/30108	1205HDX006	1213	B	05HM0	202BJ7XF2	2506			1,400,000
682/30108	1205HDX006	1213	B	05HM0	202BJ7XF1	2506			950,000
682/30108	1205HDX006	1213	B	05HM6	202BJ7XF2	2506			150,000
									2,500,000

Part II - Approved Budget

EPA IAG Identification Number: DW-70-95775601 - 3

31. Budget Categories	Itemization of All Previous Actions	Itemization of This Action	In-Kind Itemization of This Action	Itemization of Total Project Cost to Date
(a) Personnel	$596,297	$383,063		$979,360
(b) Fringe Benefits	$0			$0
(c) Travel	$209,000	$63,850		$272,850
(d) Equipment	$0	$12,000		$12,000
(e) Supplies	$20,000			$20,000
(f) Procurement / Assistance	$9,404,663	$1,676,000		$11,080,663
(g) Construction	$0			$0
(h) Other	$0			$0
(i) Total Direct Charges	$10,229,960	$2,134,913	$0	$12,364,873
(j) Indirect Costs:	$309,968	$365,087		$675,055
Charged - Amount Rate: 48.8% Base: $748,129.00 Not Charged: Funds-Out: Not charged by Other Agency Estimate by other Agency Amount $				
(k) Total (EPA Share 85.99 %) (Other Agency Share 14.01 %)	$10,539,928	$2,500,000	$0	$13,039,928

32. How was the IDC Base calculated? Labor and Overhead Costs

33. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA funds? ☒ Yes ☐ No
(Identify all equipment costing $1,000 or more)TBA

34. Are any of these funds being used on extramural agreements? ☒ Yes ☐ No

Type of Extramural Agreement: Contract

Contractor/Recipient Name (if known)	Total Extramural Amount Under This Project	Percent Funded by EPA (if known)
TBA	11080663 Total $ 11,080,663.00	100

Part III - Funding Methods and Billing Instructions

35. **(Note: EPA Agency Location Code (ALC) - 68010727)**

☒ Disbursement Agreement	Request for repayment of actual costs must be itemized on SF 1080 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002:
☒ Repayment	☒ Monthly ☐ Quarterly ☐ Upon Completion of Work
☐ Advance	Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002.
☐ Allocation Transfer-Out	Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hdqtrs. Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460.

36. ☐ Reimbursement Agreement ☐ Repayment ☐ Advance
☐ Allocation Transfer-In

Other Agency's Billing Address (include ALC or Station Symbol Number)	Other Agency's Billing Instructions and Frequency

Part IV - Acceptance Conditions	EPA Identification Number DW-70-95775601 - 3

37. Terms and Conditions, when included, are located at the end of the 1610-1, or as an attachment.

Part V - Offer and Acceptance

Note: A) For Fund-out actions, the agreement/amendment must be signed by the other agency official in duplicate and one original returned to the Grants and IA Management Division for Headquarters agreements or to the appropriate EPA Regional IA administration office within 3 calendar weeks after receipt or within any extension of time that may be granted by EPA. The agreement/amendment must be forwarded to the address cited in item 29 after acceptance signature.

Failure to return the properly executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement/amendment by the other agency after the document is signed by the EPA Award Official, which the Award Official determines to materially alter the agreement/amendment, shall void the agreement/amendment.

B) For Funds-In actions, the other agency will initiate the action and forward two original agreements/amendments to the appropriate EPA program office for signature. The agreements/amendments will then be forwarded to the appropriate EPA IA administration office for signature on behalf of the EPA. EPA will return one original copy after acceptance returned to the other agency after acceptance.

EPA IA Administration Office (for administrative assistance)	EPA Program Office (for technical assistance)
38. Organization/Address U.S. Environmental Protection Agency IASSC West 1200 Sixth Avenue, Suite 900, OMP-145 Seattle, WA 98101	**39. Organization/Address** US Environmental Protection Agency R5 - Region 5 77 West Jackson Blvd. Chicago, IL 60604-3507

Award Official on Behalf of the Environment Protection Agency

40. Digital signature applied by EPA Award Official | Armina K. Nolan - Manager - Grants and Interagency Agreements Unit	Date 05/15/2012

Authorizing Official on Behalf of the Other Agency

41. Signature	Typed Name and Title	Date
	John E. Hallman, USCG	05/18/2012

Great Lakes Restoration Initiative
Interagency Agreement
Scope of Work
FY2012

AGENCY NAME:

US Coast Guard, Office of Research, Development, Test & Evaluation, CG-926

CONTACT INFORMATION:

Toxic Substances – Mr. Shannon Jenkins
Office of Research, Development, Test & Evaluation
2100 2nd St. SW, Stop 7111
Washington, DC 20593-7111
(202)475-3490
Shannon.R.Jenkins@uscg.mil

Invasive Species – Mr. Jaurin Joseph
Office of Research, Development, Test & Evaluation
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(202) 475-3493
Jaurin.D.Joseph@uscg.mil

1. INTRODUCTION

The USCG Marine Environmental Protection (MEP) program develops and enforces regulations to avert the introduction of invasive species into the maritime environment via the operations of vessels, stop unauthorized ocean dumping, and prevent oil and chemical spills. The US Coast Guard Research and Development Center has three efforts that directly support the MEP program in the Great Lakes. The overall purpose of this Interagency Agreement is to fund efforts that will help prevent the introduction of toxic substances and invasive species into the Great Lakes.

Oil in Ice. Although oil spills in ice are rare in the Great Lakes, they are still of concern. While most oil releases during the winter months are runoffs from transportation accidents on land, changes in temperature and water level may increase risk of water spills as vessels attempt to begin the season earlier and end it later. The oil in ice project will use a series of field exercises to help assess situations for potential spills in the Great Lakes during the ice season and determine methods for response. Where identified, this effort may include developing technologies and procedures to address response performance gaps. Cooperation with organizations in Alaska will help to identify other extreme cold weather response techniques that may be applicable. GLRI funding is being used to supplement USCG RDT&E funding of field exercises supporting this effort. The first exercise was conducted pier-side at Sector Sault Ste Marie. Various cold weather spill response technologies were demonstrated in early April 2011. A more complex exercise is planned for FY2012 to evaluate cold weather spill response techniques from various candidate vessels operating in the Great Lakes.

Heavy Oil. Asphalt, tar, and heavy oils are regularly transported throughout the Great Lakes and the Great Lakes basin. There have also been significant spills, within the US, that have caused serious

economic and environmental damage. These incidents have highlighted containment and mitigation performance gaps within the spill response community when responding to these types of spills. The recovery of heavy oil effort will support an ongoing project that has already investigated and identified techniques that can be used to find submerged oil or asphalt (or similar material) that is sitting on the bottom. Contracts have already been awarded to provide further development of prototype systems that can recover submerged oil from the bottom. GLRI funds supported controlled tests of three prototypes conducted in November 2011. FY12 GLRI funds will be used to supplement USCG RDT&E funding of field tests of selected prototypes. The results will provide system configurations that can be used as a model for Great Lakes responders to either hire the specific vendors or build a specific system based on these results. The objective of this effort is to develop a system that will recover heavy oil from the lake floor. Such a system will have to do a variety of tasks to be successful. These include detection of the oil and collecting the oil into a containment vessel for proper disposal.

Ballast Water. The Great Lakes are sensitive to introductions of Invasive species (IS) via ballast water discharges by vessels entering the lakes after operating in the ocean (Salties) and translocation of IS within the Lakes by vessels transiting between ports, including Salties and vessels that operate exclusively within the Lakes (Lakers). The U. S. Coast Guard is tasked by the National Invasive Species Act (1996) to stop ship-mediated introductions of IS into U.S. waters. This program will further the development of effective and practical systems to treat ships' ballast water to prevent introductions and spread of IS. Funding will be used to develop methods and tools used to enforce compliance of ballast water discharge regulations on the Great Lakes; continue work on developing ship-based test protocols for type approval of Ballast Water Treatment Systems (BWTS); continue investigative work on the effects of BWTS on corrosion aboard Lakers; complete investigation of safety risks to vessels and personnel working in the vicinity of the CSSC fish barrier; and to begin investigating the feasibility of developing a protocol for testing BWTS against a significantly more stringent ballast water discharge standard (Phase 2 standard). Previous Coast Guard efforts and funding addressed the development of shore-based tests of treatment systems against the Phase 1 ballast water discharge standards.

2. BUDGET & PROJECT DETAIL

Focus Area	Project Title	Draft Allocation
TX	Response to Oil in Ice	$150,000
TX	Recovery of Heavy Oil	$200,000
IS	Ballast Water Treatment Improvements & Enforcement	$1,400,000
IS	Asian Carp, CSSC Marine Safety Risk Analysis/ **Framework Action Item: 2.3.7.**	$150,000

3. NARRATIVE SCOPE OF WORK:

Title: Response to Oil in Ice

Funding: $150,000

Authority: The CG has multiple authorities including the Clean Water Act and the Oil Pollution Act of 1990.

Work: This project approach was to assess and fully define the problem; identify user wants and needs; identify performance gaps; and identify and develop solutions to those gaps. First, a literature search and a search of the CG databases was conducted for data referring to spills in the Great Lakes and other fresh water bodies. A one-day workshop was convened to compile assessment data and develop likely scenarios. Then analysis was performed to match the scenarios and leverage efforts that have already been done in the Arctic region. A series of increasingly complex exercises are planned to assist in demonstrating existing response technologies and techniques; and identify current capability gaps. As performance gaps are identified for detection and recovery, additional efforts will be started to develop or adapt new techniques and technologies.

Milestones:

Project Begins with RDC Funds	December 2009
Great Lakes Assessment Workshop (complete)	August 2010
Initial Gap Analysis (complete)	December 2010
1st Field Great Lakes Exercise (complete)	April 2011
1st Exercise Report (complete)	July 2011
2nd Field Great Lakes Exercise	January 2012
2nd Exercise Report	June 2012
3rd Field Exercise (TBD location)	FY2013
Final Project Report	FY2014

Great Lakes Action Plan Measure of Progress:

Long Term Goal 2
The release of toxic substances in toxic amounts is prevented and the release of any or all persistent toxic substances (PTS) to the Great Lakes basin ecosystem is virtually eliminated.

There are no specific Action Plan Objectives or Measures of Progress that are relevant to this project. Containment and removal of discharged oil from Great Lakes waters as quickly as possible during the winter periods will minimize the environmental impact to the Great Lakes basin ecosystem. Outcomes of this project will provide valuable input for the 17 Coast Guard area contingency plans on the Great Lakes that would be activated in response to an oil spill in or on ice. It will also provide input to tank vessel operators and marine transportation facility operators who must maintain vessel and facility response plans that include a capability to respond to oil discharged on or in ice.

Title: Recovery of Heavy Oil

Funding: $250,000

Authority: The CG has multiple authorities including the Clean Water Act and the Oil Pollution Act of 1990.

Work: This project was started at RDC in 2007. The first objective was to identify and develop technologies capable of detecting heavy oil on the sea floor. Testing of detection concepts and prototype systems has been completed. A report documents the results and an appendix provides a decision tool for the Federal On-Scene Commander (FOSC). RDC awarded three design contracts to design integrated detection and recovery systems in November, 2009, based on a Broad Agency Announcement (BAA). In late FY2010, three vendors were selected to build a prototype system. Testing occurred in November 2011, at the Ohmsett facility (www.ohmsett.com). The final phase will be a down-select of prototypes for a field demonstration in FY12.

Milestones:

Recovery System Design Contracts Awarded (completed)	November 2009
Recovery System Design Reports Submitted (completed)	August 2010
Decision to Fund Prototype Systems (completed)	October 2010
Controlled Test of Prototype Systems (completed)	November 2011
Prototype Test Report	July 2012
Prototype Field Demonstration	August 2012
Final Project Report	May 2013

Great Lakes Action Plan Measure of Progress:

Long Term Goal 2
The release of toxic substances in toxic amounts is prevented and the release of any or all persistent toxic substances (PTS) to the Great Lakes basin ecosystem is virtually eliminated.

There are no specific Action Plan Objectives or Measures of Progress that are relevant to this project. Containment and removal of submerged oil from Great Lakes waters as quickly as possible will minimize the environmental impact to the Great Lakes basin ecosystem. Outcomes of this project will provide valuable input and decision tools for the 17 Coast Guard area contingency plans on the Great Lakes that would be activated in response to a spill of heavy oil that may submerge in a fresh water environment. It will also provide input to tank vessel operators and marine transportation facility operators who handle heavy oil and must maintain vessel and facility response plans that include a capability to respond to submerged oil. This capability may also be adapted for recovery of other less toxic materials such as asphalt and other solid commoditities.

Title: Ballast Water Treatment Improvements & Enforcement

Funding: $1.4 million

Authority: U.S. Coast Guard is tasked to reduce the number of introductions of NIS under the National Invasive Species Act of 1996 (NISA '96)

Work:
Ship-Based Approval Tests: As part of its type approval process, Coast Guard intends to require tests of BWTS aboard a ship. Project work will continue with the testing of a protocol for shipboard testing based on the shore-based protocol developed collaboratively by the USCG and EPA through the Environmental Technology Verification (ETV) Program; and testing recommendations developed through the USCG STEP. Validating the shipboard test protocols continues to be a cooperative effort between MARAD, EPA/ETV, and the Research and Development Center (RDC). MARAD has selected the Indiana Harbor as the Laker vessel to be used as a test platform and continues to move forward with the selection and installation of a BWTS aboard that vessel. USCG and EPA continue to develop the draft Shipboard Test protocol under ETV; and the RDC continues to develop a means to sample large volumes of ballast water and validate both the sampling mechanism and the test protocol aboard Indiana Harbor.

Corrosion Study: Work will continue to investigate the extent of corrosion issues in tanks and conduct tests on different metals used in tank construction, based on several BWTS types. This effort will build upon the initial investigative work by conducting controlled lab tests of materials in fresh water indicative of the chemical makeup of Great Lakes water.

Ship-Based Compliance Enforcement: Tools and methods for rapidly evaluating whether a BWT system has been used and is working properly are necessary for shipboard compliance enforcement. Such tools could also potentially be used by BWTS operators to check the efficacy of their systems. Finding and developing these tools will be accomplished using requirements established by Coast Guard enforcement personnel and by a workshop of technical personnel from industry, Coast Guard, and academia. Preliminary scoping work was completed under an earlier GLRI funded project. RDC will use an RFI to determine what technologies are available; or if development of technologies are needed to produce specific tools. Based on these technologies, methods and procedures will be developed for efficiently and economically assessing compliance with Ballast Water Discharge Standards. This will be an Operating Concept for BWDS enforcement that is compatible with the new standards and the new technologies. This effort will also help frame the changes in procedures, manpower, training, and logistics that will be necessary to adequately enforce the BWDS. It is expected that a mix of increased CG capability, new technology, leveraging other agencies, and leveraging the regulated community will be required.

Phase 2 Ballast Water Discharge Standard (BWDS) Test Protocol Development: RDC will investigate the feasibility to determine whether technology developed to comply with the Phase 2 performance standard can practicably be implemented and whether sampling and testing protocols that can assure accurate measurement of compliance with the Phase 2 performance standard can practicably be implemented. A preliminary investigation should consider the statistical and sampling issues prerequisite to being able to state with statistical confidence that the Phase 2 performance standard is met during a test. It should be determined if the logistics of collecting, concentrating and counting organisms in all size classes within the volumes of water required to achieve standards up to 1000x more stringent than the IMO/Phase 1 performance standard are practicable. Consideration should be given to the availability, accuracy, precision, and cost effectiveness of methods and technologies for measuring the concentrations of organisms, treatment chemicals, or other pertinent parameters in treated ballast water as would be required under any alternative discharge standard.

FY12 GLRI funds will be used to begin preliminary investigation into the feasibility of leveraging current protocol development work for Phase 1 BWDS. The effectiveness of the current protocol in detecting with accuracy and precision organisms at significantly lower concentrations than in the Phase 1 BWDS is not well resolved. Testing of the current protocol's limits of detection will be needed; and, as identified by the recent EPA Science advisory Board Report on BWT technology, research and development of an enhanced protocol is likely to be necessary to support testing at more stringent standards. Once developed and approved, this protocol will be used by shore-based test facilities to test commercial ballast water treatment systems to determine if they perform in accordance with the more stringent BWDS.

Asian Carp, Framework Action Item: 2.3.7. Chicago Sanitary & Ship Canal (CSSC) Electric Fish Barrier Marine Safety Risk Assessment and Risk Mitigation Measures: The electric fish barrier system on the Chicago Sanitary and Ship Canal (CSSC), designed to limit the spread of various species with the more-recent emphasis on the "lake-ward" influx of Asian Carp, presents multiple, potential hazards to marine safety. Various regulatory actions prescribe operating rules and guidance to promote navigation safety for commercial and recreational mariners transiting the CSSC in the vicinity of the barrier; and promote safe work practices and operating standards for commercial facility operations that operate or moor vessels in the vicinity of the barrier. This project will complete work to collect data and develop a risk matrix with respect to marine safety, analyze present risk mitigation measures, determine whether there are gaps between risks/risk scenarios and the mitigation measures in place, and determine whether those measures are unnecessary or whether alternative measures are needed.

Milestones

Ship-Based Approval Tests:

RFI (complete)	February 2011
Contract – Shipboard Tests (complete)	July 2011
Develop Generic Protocol for Filtration Skid	February 2012
Validation of Filtration Skid	August 2012
Report – Shipboard Approval Tests	October 2014

Shipboard Compliance:

Contract-Technology Market Research (complete)	March 2011
Report-Technology Market Research Assessment	April 2012
Tools Development BAA	June 2012
Evaluate BAA Responses	August 2012
Award Tools Design Contracts	October 2012
Evaluate Tools Designs	January 2013
Execute Tools Development Option	March 2013
Controlled/Lab Test Tools Prototypes	September 2013
Test Report	December 2013
Compliance Procedures Development	December 2013
Tools Field Test	July 2014
Report-Performance & Field Test of Tools	October 2014

Corrosion Study:

Contract-Scoping Study (complete)	February 2011
Report – Scoping Study (complete)	October 2011
Contract-Lab Testing	May 2012
Report-Corrosion Lab Testing	September 2012

CSSC Marine Safety Risk Analysis:

Data Collection and Analysis	June 2012
Consequence Investigation and Scientific Measurements	October 2012
Final Report	March 2013

Phase 2 BWDS Test Protocol Development:

Practicability Investigation	May 2013
Report – Practicability Investigation	September 2013
Key Decision Point - Phase 2 Protocol Development	October 2013
Phase 2 Shore-Based Test Protocol Development	FY2016

Great Lakes Action Plan Measure of Progress:

Long Term Goal 1

The introduction of new invasive species (via ballast water) to the Great Lakes basin ecosystem is eliminated, reflecting a "zero tolerance policy" toward invasives.

Objective

Ten technologies that prevent the introduction of invasive species and five technologies that either contain or control invasive species will be developed or refined and piloted by 2014.

Measure of Progress 1

Rate of non-native species newly detected in the Great Lakes ecosystem does not exceed one (1.0) species per year. These results can be achieved after the project work has been completed and ballast water treatment systems are operating on all vessels discharging ballast water into the Great Lakes and the Coast Guard is able to ensure the systems are operating as designed.

Results of these tasks will be the development of ship-based test protocols for ballast water treatment systems (BWTS) for use on vessels entering the Great Lakes; production-ready field verification tools for enforcing the BWDS on the Great Lakes; procedures for conducting CG inspections and performance verifications of operational BWTS on vessels discharging ballast water on the Great Lakes; science-based results of the effects BWTS use have on uncoated Laker ballast tanks; fact-based analysis of marine safety risks in the vicinity of the CSSC fish barrier; and science-based analysis of practicability of the government proceeding with implementation of the Phase 2 Ballast Water Discharge Standard for vessels discharging ballast water on the Great Lakes.

4. COLLABORATIVE ARRANGEMENTS

The RDC has in place a MIPR with MARAD for supporting ship-based Approval Tests. Continued coordination with MARAD is ongoing for all ballast water treatment efforts. EPA ETV is also collaborating by developing the ship-based test protocol; and will be involved in coordination for the Phase 2 practicability investigation. It is expected that there will be extensive collaboration with the US Army Corps of Engineers on the CSSC Marine Safety Risk Assessment Analysis.

5. FUNDING SUMMARY SPREADSHEET

See Attached spreadsheet

As in the past, GLRI FY2012 funds are supplementing USCG RDT&E project funding for the Ballast Water Treatment, Response to Oil in Ice, and Recovery of Heavy Oil projects. In-kind USCG RDT&E funding, in the amount of approximately $3.0 Million has been spend on the Ballast Water Treatment project from FY2009-2011; and for FY2012, about $118K in USCG RDT&E funds will be expended. For the Response to Oil in Ice project, $870K of in-kind RDT&E funding has been expended from FY2010-2011; and for FY2012, about $423K in USCG RDT&E funds will be expended. For the Recovery of Heavy Oil project, $4.1 Million of in-kind RDT&E funding has been expended from FY2006-2011; and for FY2012, about $209K in USCG RDT&E funds will be expended.

Great Lakes Restoration Initiative
Interagency Agreement
Scope of Work
FY12

AGENCY NAME: US COAST GUARD

CONTACT INFORMATION: Mr. Greg Carpenter
Civil Engineering Unit Cleveland
(216) 902-6219
Gregory.O.Carpenter@uscg.mil

1. INTRODUCTION

The objective of this effort is to comply with the requirements of Comprehensive Environmental Response, Compensation and Liability Act in order to prevent hazardous substances from entering the sediments and waters of the Great Lakes. Great Lakes Restoration initiative (GLRI) funds are being utilized at ten (10) lighthouse properties in the Great Lakes. Two (2) said properties, which have been funded with FY11 funds, are nearly complete.

2. BUDGET & PROJECT DETAIL

Focus Area	Project Title	Draft Allocation
TX	Lighthouse Remediation	$600,000

3. NARRATIVE SCOPE OF WORK:

Title: Gull Rock Lighthouse, Michigan
Funding: $250K
Authority: GLRI - CERCLA
Work: Investigate the Gull Rock Lighthouse for contamination of concern relating to previous storage and use of hazardous materials under the Comprehensive Environmental Response, Compensation and Liability Act. The lighthouse property will be investigated for the specific chemicals of concern that may have been present at this location.

Milestones:

CERCLA Site Investigation/Preliminary Assessment	September 2013
CERCLA Field Sampling Plan/Quality Assurance Project Plan	March 2014
CERCLA Engineering Evaluation/Cost Analysis	November 2014
CERCLA Removal Action	July 2015

Great Lakes Action Plan Measure of Progress:

Long Term Goal 2
The release of toxic substances in toxic amounts is prevented and the release of any or all persistent toxic substances (PTS) to the Great Lakes basin ecosystem is virtually eliminated.

There are no specific Action Plan Objectives or Measures of Progress that are relevant to this project. However, these remedial lighthouse investigations and cleanup activities will remove toxic substances that can potentially impact sediments and waters of the Great Lakes. The nature of the remedial actions (e.g. removal of lead paints, top soil removal, small quantities of toxic substances spread throughout the site) make it difficult to accurately quantify the toxic substance amounts. Total amounts of contaminated topsoil removed will be available at the completion of the projects.

Title: Manitou Island Lighthouse, Michigan
Funding: $350K
Authority: GLRI - CERCLA
Work: Investigate the Manitou Island Lighthouse for contamination of concern relating to previous storage and use of hazardous materials under the Comprehensive Environmental Response, Compensation and Liability Act. The lighthouse property will be investigated for the specific chemicals of concern that may have been present at this location.

Milestones:

CERCLA Site Investigation/Preliminary Assessment	September 2013
CERCLA Field Sampling Plan/Quality Assurance Project Plan	March 2014
CERCLA Engineering Evaluation/Cost Analysis	November 2014
CERCLA Removal Action	July 2015

Great Lakes Action Plan Measure of Progress:

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4. COLLABORATIVE ARRANGEMENTS

Interagency Agreement (IAG) exists between the USEPA Region 5 and USCG for collaborative reviews of Great Lakes projects.

5. FUNDING SUMMARY SPREADSHEET

For each focus area, identify the following budget categories: personnel, fringe benefits, travel, equipment, other, grants, contracts procurement/assistance and indirect cost. Please utilize the EPA provided model funding summary spreadsheet. See attached spreadsheet.

Great Lakes Restoration Initiative
Project Funding Summary Spreadsheet
FY12
($1750K)

7/5/2012

US Coast Guard

GREY AREAS WILL AUTOMATICALLY CALCULATE TOTALS

Focus Area 1. Toxic Substances and Areas of Concern

Template Number	Template Name	RDC Labor	RDC Overhead	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance[1]	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
105	Oil in Ice	$0	$0	$0	$0	$0	$0	$150,000	$150,000	$150,000		$150,000	0.00%
106	Recovery of Heavy Oil	$0	$0	$0	$0	$0	$0	$200,000	$200,000	$200,000		$200,000	0.00%
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
	Sub-total	$0	$0	$0	$0	$0	$0	$350,000	$350,000	$350,000	$0	$350,000	#DIV/0!

Focus Area 2. Invasive Species

Template Number	Template Name	RDC Labor	RDC Overhead	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance[1]	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
108	Ballast Water Treatment Improvements & Enforcement	$383,063	$365,087	$63,850	$12,000	$0	$0	$576,000	$576,000	$1,400,000		$1,400,000	0.00%
									$0	$0		$0	#DIV/0!
	CSSC Marine Safety Risk Analysis/AC Framework Item 2.3.7			$8,000		$2,000		$140,000	$140,000	$150,000		$210,000	0.00%
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
	Sub-total	$383,063	$365,087	$71,850	$12,000	$2,000	$0	$716,000	$716,000	$1,550,000	$0	$1,610,000	#DIV/0!

Focus Area 3. Habitat and Wildlife Protection

Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance[1]	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
	Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!

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FY12
($1750K)

Focus Area 4. Nearshore Health and Nonpoint Source Pollution														
	Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance?	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
		Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!
Focus Area 5. Accountability, Education, Monitoring, Evaluation, Communication and Partnership														
	Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance?	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
		Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!
		AWARD TOTAL	$383,063	$365,087	$71,850	$12,000	$2,000	$0	$1,066,000	$1,066,000	$1,900,000	$0	$1,960,000	

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($000)

7/5/2012

NAME OF AGENCY

GREY AREAS WILL AUTOMATICALLY CALCULATE TOTALS

Focus Area 1. Toxic Substances and Areas of Concern

Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance*	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
107	Lighthouse Remediation Project - Gull Rock Lighthouse, Michigan			$5,000				$250,000	$250,000	$255,000		$255,000	0.00%
107	Lighthouse Remediation Project - Manitou Island Lighthouse, Michigan			$5,000				$350,000	$350,000	$355,000		$355,000	0.00%
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
	Sub-total	$0	$0	$10,000	$0	$0	$0	$600,000	$600,000	$610,000	$0	$610,000	#DIV/0!

Focus Area 2. Invasive Species

Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance*	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
	Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!

Focus Area 3. Habitat and Wildlife Protection

Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance*	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
									$0	$0		$0	#DIV/0!
	Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!

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Project Funding Summary Spreadsheet
FY XX
($000)

Focus Area 4. Nearshore Health and Nonpoint Source Pollution	Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
		Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!

Focus Area 5. Accountability, Education, Monitoring, Evaluation, Communication and Partnership	Template Number	Template Name	Personnel	Fringe Benefits	Travel	Equipment	Other	Grants	Contracts	Procurement/ Assistance	Sub-Total	Indirect Cost	Total	Indirect Cost Rates
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
										$0	$0		$0	#DIV/0!
		Sub-total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	#DIV/0!
		AWARD TOTAL	$0	$0	$10,000	$0	$0	$0	$600,000	$600,000	$610,000	$0	$610,000	